



Office of Energy Projects Energy Infrastructure Update *For May 2018*

Natural Gas Highlights

- Corpus Christi Pipeline received authorization to place into service its Corpus Christi Pipeline Project in San Patricio and Nueces Counties, TX, which will provide 2,250 MMcf/d of capacity and bi-directional flow to the proposed Corpus Christi LNG terminal.
- Questar Southern Trails received authorization to abandon its 488-mile pipeline system, including four compressor stations, all receipt and delivery points, and all related facilities. This would involve abandoning in place 220 miles of pipeline, and abandoning by sale to the Navajo Tribal Utility Authority 268 miles of pipeline.
- The Navajo Tribal Utility Authority received authorization for a determination of a service area within which it may, without further Commission authorization, enlarge or expand its natural gas distribution facilities. This is related to its proposed purchase of 268 miles of pipeline from Questar Southern Trails.
- CIG received authorization for its 2018 Line Nos. 5A and 5B Expansion Project, which would modify three compressor stations in Weld County, CO, to allow for 230 MMcf/d of additional capacity from mainline receipt points along the Colorado Front Range to the Cheyenne Hub Complex.
- Columbia Gas received authorization for its Line 1983 Glenville to Smithfield Launcher & Receiver Project, which would enable the in-line inspection of a portion of Line 1983 in Gilmer, Doddridge, and Wetzel Counties, WV.
- Paiute Pipeline received authorization to construct 8.46 miles of upsized or looped pipeline and to abandon certain pipe sections along its Carson and South Tahoe Laterals in Western NV.
- Gulf South Pipeline received authorization to construct the 10,000 HP Westlake Compressor Station, including approximately 0.3 miles of 16-inch pipeline and other appurtenances in Calcasieu Parish, LA.
- High Point Gas received authorization to lease 150 MMcf/d of capacity to transport offshore gas production to an interconnection with Destin Pipeline in MS.
- Florida Southeast Connection received authorization to construct its Okeechobee Lateral Project, a 5.2 mile pipeline that would supply a new powerplant in Okeechobee County, FL.
- Columbia Gas of Pennsylvania was granted a service area determination within which it may, without further Commission authorization, enlarge or expand its facilities in order to transport gas from a delivery point in Columbiana County, OH to consumers in Pennsylvania.
- ANR Storage received authorization to construct the Cold Springs 12-17 injection/withdrawal well at its Cold Springs 12 Storage Field in Kalkaska County, MI. The new well will not affect the field's capacity or deliverability.
- Wyoming Interstate received authorization for its Cheyenne Compressor Station Expansion Project, which would reclassify an existing spare unit for use in day-to-day transportation in Weld County, CO, and allow WIC to accept additional deliveries at the Flying Hawk interconnect with CIG.
- National Fuel received authorization to construct its Line N to Monaca Project, including 4.5 miles of pipeline, a metering and regulating station/delivery point, and other related modifications and appurtenances in Beaver and Washington Counties, PA. The project would provide 133 MMcf/d of firm transportation services to the Shell Petrochemicals Complex in Potter Township, PA.
- UGI Central Penn Gas (CPG) and UGI Utilities (UGIU) request authorization for CPG to abandon certain limited jurisdiction certificates, and for transfer of a service area determination to UGIU as part of the pending transfer of local distribution assets from CPG to UGIU in Maryland and Pennsylvania.
- PNGTS requests authorization to increase the certificated capacity on the system it jointly owns with Maritimes & Northeast Pipeline, from Westbrook, ME to Dracut, MA, by 11 MMcf/d, and approval of a lease agreement with M&NE.
- WBI Energy requests authorization to increase from 205 to 800 psi the maximum allowable operating pressure of its 6-inch Garland to Powell Lateral in Park and Big Horn Counties, WY, from the Garland Transfer Station to Valve No. 3.
- Enable Midstream requests authorization to decrease the Maximum Operating Pressure of its Line A-86, located in Jefferson County, MO. This change would not affect capacity or firm service.
- Texas Eastern requests authorization to abandon gathering Line 41-A-5-B and related facilities located offshore Louisiana.
- Texas Eastern requests authorization to abandon gathering Line 41-A-8 and related facilities located offshore Louisiana.



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- NGPL requests authorization for its Sabine Pass Compression Project, including a 22,490 HP compressor station in Cameron Parish, LA, and interconnections to its existing Louisiana Line Nos. 1 and 2 and NGPL Lateral, which would connect the new compressor station to the Sabine Pass LNG export terminal.
- Equitrans requests authorization to construct its H-320 Pipeline Project, which consists of approximately 5-miles of new pipeline to deliver 85 MMcf/d of natural gas to the proposed ESC Harrison County Power Plant in Harrison County, WV.
- Enable Gas requests authorization for its Allen Compressor Station Modification Project, which would increase compression from 12,200 to 16,000 HP and increase pipeline capacity by 20 MMcf/d at its Allen Compressor Station in Hughes County, OK.
- National Fuel requests authorization for its Line KNYS Uprate Project, which would increase the maximum allowable operating pressure of a portion of the line in Cattaraugus County, NY and McKean County, PA, and increase pipeline capacity by 15 MMcf/d.
- Pine Prairie Energy requests authorization to reallocate the certificated capacities for its storage caverns Nos. 1-7 from working to base gas, increasing the base gas by approximately 8 MMcf/d in order to maintain the ability to provide high deliverability rates at its facility in Southern Louisiana.
- Saltville Gas Storage requests authorization to drill two new injection and withdrawal wells to replace two previously abandoned and one existing wells, and to abandon one existing monitoring well at the facility, which would allow it to maintain the deliverability of its Early Grove natural gas storage facility in Scott and Washington Counties, VA.



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Natural Gas Activities in May 2018

Status	No. of Projects	Storage Capacity (Bcf)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	1			2,250	23	53,260
Certificated	6			1,188	18	12,700
Proposed	5			531	5	25,290
Storage						
Placed in Service	0	0	0			0
Certificated	0	0	0			0
Proposed	0	0	0			0
LNG (Import & Export)						
Placed in Service (Export)	0	0	0			0
Certificated (Import/Export)	0	0	0			0
Proposed (Import/Export)	0	0	0			0

Source: Staff Database

Natural Gas Activities through May 31, 2018 January through May 31, 2017

Status	No. of Projects	Storage Capacity (BCF)	Deliverability (MMcf/d)	Capacity (MMcf/d)	Miles of Pipeline	Compression (HP)
Pipeline						
Placed in Service	4			3,230.0	79.3	116,020
through May 31, 2017	8			2,479.3	58.4	153,939
Certificated	25			5,060.7	286.1	149,395
through May 31, 2017	14			9,627.9	1,254.8	623,318
Storage						
Placed in Service	0	0.0	0.0			0
through May 31, 2017	0	0.0	0.0			0
Certificated	3	3,600.3	143.0			0
through May 31, 2017	0	0.0	0.0			0
LNG (Import & Export)						
Placed in Service (Export)	1	0.0	825.0			0
through May 31, 2017	1	0.0	700.0			0
Certificated (Import/Export)	0	0.0	0.0			0
through May 31, 2017	0	0.0	0.0			0

Source: Staff Database



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Hydropower Highlights (nonfederal)

There were no hydropower activities this month.

Hydropower Project Activities Year to Date (through May 31, 2018)

Status	Conventional		Pumped Storage		Hydrokinetic		Total No. of Projects	Total Capacity (MW)
	No.	Capacity (MW)	No.	Capacity (MW)	No.	Capacity (MW)		
Filed								
License	0	0	0	0	0	0	0	0
10-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	1	1,740	1	335,000	0	0	2	336,740
Conduit Exemption	0	0	0	0	0	0	0	0
Issued								
License	0	0	0	0	0	0	0	0
10-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0
Placed in Service								
License	2	12,000	0	0	0	0	2	12,000
10-MW Exemption	0	0	0	0	0	0	0	0
Capacity Amendment	0	0	0	0	0	0	0	0
Conduit Exemption	0	0	0	0	0	0	0	0

Source: Staff Database

Electric Generation Highlights

- Footprint Power Salem Harbor Operations LLC's 680.0 MW natural gas-fired Salem Harbor Project in Essex County, MA is online.
- CPV Valley LLC's 653.0 MW natural gas-fired CPV Valley in Orange County, NY is online.
- NTE Ohio LLC's 475.0 MW natural gas-fired Middletown Energy Center in Butler County, OH is online.
- Bayonne Energy Center LLC's 128.0 MW natural gas-fired Bayonne Energy Center in Hudson County, NJ is online.
- Wallingford Energy II LLC's 100.0 natural gas-fired PPL Wallingford Energy LLC in New Haven County, CT is online.
- Vistra Energy's 180.0 MW solar powered Luminant Castle Gap Project in Upton County, TX is online. The power generated is sold to Luminant under long-term contract.
- Stuttgart Solar LLC's 81.0 MW Stuttgart Solar Project in Arkansas County, AR is online. The power generated is sold to Entergy Arkansas Inc. under long-term contract.
- Hawaiian Electric Co. Inc.'s 50.6 MW Schofield Barracks Solar Project in Honolulu County, HI is online. The power generated is sold to Hawaiian Electric Co. Inc. under long-term contract.
- Pinal Central Energy Center LLC's 20.0 MW solar powered Pinal Central Energy Centre in Pinal County, AZ is online. The power generated is sold to Salt River Project under long-term contract.
- WGL Energy Services Inc.'s 6.0 MW Kentuck Solar Project in Pittsylvania County, VA is online. The power generated is sold to Danville Power & Light Department under long-term contract.
- WasecaSun LLC's 6.0 MW solar powered Wasecasun Project in Waseca County, MN is online. The power generated is sold to the Public Service Co. of CO under long-term contract.
- Hawaiian Electric Co. Inc.'s 50.0 MW biomass fueled Schofield Generating Station in Honolulu County, HI is online.



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New Generation In-Service (New Build and Expansion)

Primary Fuel Type	May 2018		January – May 2018 Cumulative		January – May 2017 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	0	0	0	0
Natural Gas	14	2,087	36	6,646	52	7,970
Nuclear	0	0	1	4	1	102
Oil	0	0	7	11	5	21
Water	2	4	8	22	7	16
Wind	0	0	18	1,956	43	3,532
Biomass	6	50	11	66	16	167
Geothermal Steam	1	2	2	21	1	18
Solar	16	312	181	1,921	216	2,166
Waste Heat	0	0	2	80	1	220
Other *	1	0	8	5	19	1
Total	40	2,455	274	10,732	361	14,213

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.

* "Other" includes purchased steam, tires, and miscellaneous technology such as batteries, fuel cells, energy storage, and fly wheel.

Total Available Installed Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	273.30	23.04%
Natural Gas	515.47	43.46%
Nuclear	108.18	9.12%
Oil	42.04	3.54%
Water	100.80	8.50%
Wind	90.95	7.67%
Biomass	16.52	1.39%
Geothermal Steam	3.85	0.32%
Solar	32.92	2.78%
Waste Heat	1.34	0.11%
Other*	0.79	0.07%
Total	1,186.16	100.00%

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.



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Proposed Generation Additions and Retirements by June 2021

Primary Fuel Type	Additions		Retirements	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	2	912	67	16,810
Natural Gas	342	85,686	134	14,589
Nuclear	6	6,363	6	5,607
Oil	25	744	43	482
Water	252	12,558	25	544
Wind	493	91,049	2	68
Biomass	60	705	19	50
Geothermal Steam	24	1,115	0	0
Solar	1,797	52,218	5	2
Waste Heat	6	96	0	0
Other *	62	680	1	0
Total	3,069	252,126	302	38,152

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.

* "Other" includes purchased steam, tires, and miscellaneous technology such as batteries, fuel cells, energy storage, and fly wheel.

Electric Transmission Highlights

- Austin Energy has completed the 8.0 mile, 345 kV Gilleland – Techridge Transmission Project in TX.

Voltage (kV)	Transmission Projects Completed				Proposed Transmission Projects In-Service by June 2020	
	May 2018	May 2017	January – May 2018 Cumulative	January – December 2017 Cumulative	High Probability of Completion	All
	Line Length (miles)					
≤230	0.0	27.8	85.0	316.9	1,274.0	2,956.9
345	8.0	0.0	141.0	218.5	2,391.5	4,047.5
500	0.0	0.0	0.0	0.0	533.4	1,818.4
Total U.S.	8.0	27.8	226.0	535.4	4,198.9	8,822.8

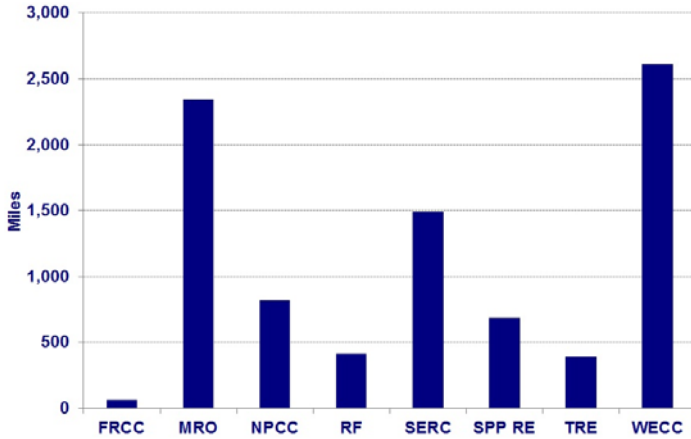
Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2018 The C Three Group, LLC.



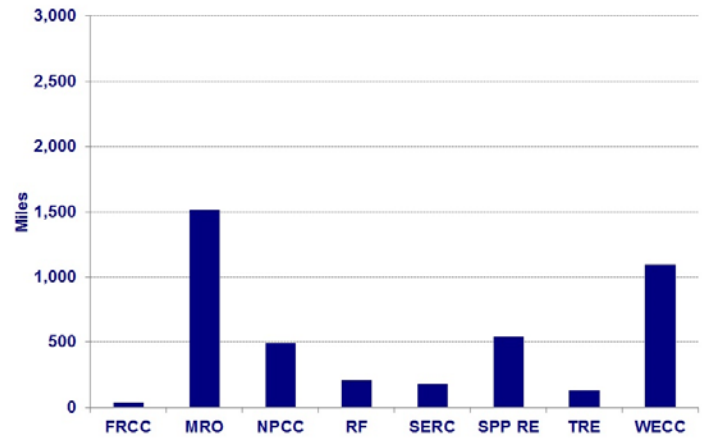
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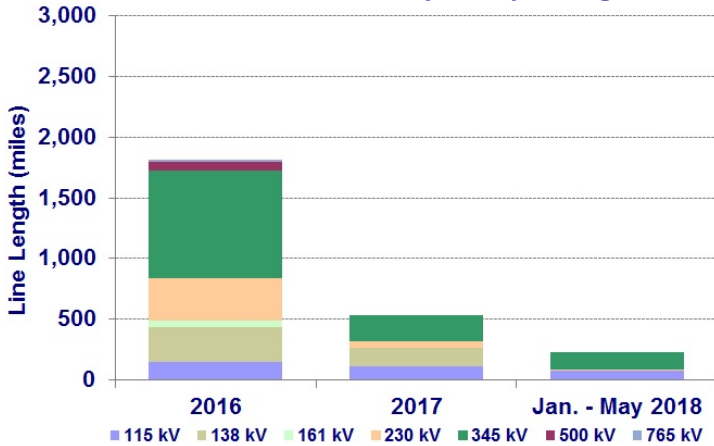
All Transmission Projects with a Proposed In-Service Date by June 2020



Transmission Projects with a High Probability of being completed by June 2020



New Transmission Projects by Voltage



Sources: Data derived from Staff Database and U.S. Electric Transmission Projects ©2018 The C Three Group, LLC.

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